

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions and listings of claims in the application.

### **LISTING OF CLAIMS**

1 – 20. (cancelled)

21. (currently amended) A production method of the laminated holographic medium comprising the steps of:

providing an identification information recording medium by combining a recording layer which is arranged on an exterior ~~the~~ surface of the recording medium, a gap layer, a first core layer, a first diffraction grating layer for recording data and a first cladding layer;

~~while the recording layer is exposed, recording information data on an exposed surface of the recording layer~~ by radiating a beam directly onto the recording layer without passing through another layer of the recording medium, where the recording is in a form of a recording mark transmittance or non-transmittance of light indicating the information data in accordance with a presence of a hole or a degree of transmittance of the light;

providing a ROM type recording medium by combining a second cladding layer, a second core layer and a second diffraction grating layer; and

combining the identification information recording medium and the ROM type recording medium.

22 – 25. (cancelled)

26. (withdrawn) A laminated holographic medium of a laminated holographic memory system, wherein

the laminated holographic memory system includes:

the laminated holographic medium comprising;

a core layer to which an incident light comes in; and

a diffraction grating layer that is formed by converting a form or a refractive index distribution and from which a reproduction beam goes out; and comprises

a reproduction apparatus that radiates the incident light and detects the reproduction beam, and

a recording layer that comprises a recording mark that is provided at a position that is transformed in accordance with a predetermined regulation and based on a presence of brightness/darkness and a position of the reproduction beam radiated on the reproduction apparatus determined beforehand, and that expresses information by a presence of a hole that transmits or shades light or by a degree of transmittance of the reproduction beam; and

a diffraction grating layer for recording data that is formed to reproduce the presence and a position of the recording mark on a recording layer corresponding to the presence of brightness/darkness and the position of the reproduction beam determined beforehand on the reproduction apparatus.

27 – 31. (cancelled)

32. (currently amended) An authentication sheet production method comprising steps of:

providing an identification information recording medium by combining a recording layer which is arranged on an exterior ~~the~~ surface of the recording medium, a gap layer, a first core layer, a first diffraction grating layer for recording data and a first cladding layer; and

~~while the recording layer is exposed, recording information data on an exposed surface of the recording layer~~ by radiating a beam directly onto the recording layer without passing through another layer of the recording medium, where the recording is in a form of a recording mark transmittance or non-transmittance of light indicating the information data in accordance with the presence of a hole or a degree of transmittance of the light.

33. (previously presented) An authentication sheet produced by using a production method according to claim 32.

34 – 37. (cancelled)

38. (previously presented) A laminated holographic medium produced by using a production method according to claim 21.

39. (previously presented) A laminated holographic medium according to claim 38, further comprising: a reflection layer, wherein

the first diffraction grating layer, the recording layer and the reflection layer are arranged in an order of the first diffraction grating layer, the recording layer and the reflection layer.